IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In reapplication of	:	Customer Number: 60033
Gupta et al.	:	Confirmation No.: 5648
Application No. 10/700,431	:	Group Art Unit: 2191
Filed: 11-04-2003	:	Examiner: Ted Vo

For: FACILITATION OF MULTI-PROJECT MANAGEMENT USING CRITICAL CHAIN METHODOLOGY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA

INTERVIEW AGENDA FOR TELEPHONIC EXAMINER INTERVIEW
SCHEDULED FOR MONDAY AUGUST 31, 2009 AT 1PM

Examiner Vo:

Pursuant to my telephone discussion with you today, herewith is a proposed interview agenda to discuss the references cited by you in the Office Action dated as mailed on 6-10-2009, namely, the references of Leach, "Critical Chain ...," API, 1997 ("Leach1") and Leach, "Schedule and Cost ...," API, 2002 ("Leach2"). Applicant thanks you for the upcoming **telephonic examiner interview scheduled for Monday August 31, 2009 at 1pm**.

(Copy to Wei Zhen)

Pending Independent Claims:

1. A method on a computer for providing critical chain-based project management across a plurality of projects, comprising:

generating a plurality of project plans having a critical chain, each of the plurality of project plans corresponding to one of the plurality of projects, wherein a project comprises at least one task;

generating buffers for each of the plurality of projects, wherein at least one of the buffers generated is placed on the critical chain;

reconciling project resources among the plurality of projects so as to accommodate the critical chain;

executing the plurality of project plans;

continuously providing status information about the buffers to a user; and

allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers.

5. A method on a computer for providing critical chain-based project management across a plurality of projects, comprising:

generating a plurality of project plans having a critical chain, each of the plurality of project plans corresponding to one of the plurality of projects, wherein a project comprises at least one task;

generating buffers for each of the plurality of projects, wherein at least one of the buffers generated is placed on the critical chain;

reconciling project resources among the plurality of projects so as to

accommodate the critical chain;

executing the plurality of project plans;

continuously providing status information about the buffers to a user;

allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers; and

continuously modifying task prioritization for any task of the plurality of projects based on the status information about the buffers, wherein task prioritization is calculated across the plurality of projects.

9. A server for providing critical chain-based project management across a plurality of projects, the server comprising a memory storage device including computers instructions for:

generating a plurality of project plans having a critical chain, each of the plurality of project plans corresponding to one of the plurality of projects, wherein a project comprises at least one task;

generating buffers for each of the plurality of projects, wherein at least one of the buffers generated is placed on the critical chain;

reconciling project resources among the plurality of projects so as to accommodate the critical chain;

executing the plurality of project plans;

continuously providing status information about the buffers to a user; and

providing the user with an interface for allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers.

13. A server for providing critical chain-based project management across a plurality of projects, the server comprising a memory storage device including computers instructions for:

generating a plurality of project plans having a critical chain, each of the plurality of project plans corresponding to one of the plurality of projects, wherein a project comprises at least one task;

generating buffers for each of the plurality of projects, wherein at least one of the buffers generated is placed on the critical chain;

reconciling project resources among the plurality of projects so as to accommodate the critical chain;

executing the plurality of project plans;

continuously providing status information about the buffers to a user;

allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers; and

continuously modifying task prioritization for any task of the plurality of projects based on the status information about the buffers, wherein task prioritization is calculated across the plurality of projects.

17. A memory storage device including computer instructions for providing critical chain-based project management across a plurality of projects, the computer instructions including instructions for:

generating a plurality of project plans having a critical chain, each of the plurality of project plans corresponding to one of the plurality of projects, wherein a project comprises at least one task;

generating buffers for each of the plurality of projects, wherein at least one of the buffers generated is placed on the critical chain;

reconciling project resources among the plurality of projects so as to accommodate the critical chain;

executing the plurality of project plans;

continuously providing status information about the buffers to a user;

providing an interface to the user for allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers; and

continuously modifying task prioritization for any task of the plurality of projects based on the status information about the buffers, wherein task prioritization is calculated across the plurality of projects.

AGENDA ITEM #1:

Improper to Use Two References in a 35 U.S.C. § 102(a) Rejection

The Examiner states on p. 2 of the Office Action that claims 1, 5, 9, 13-15 and 17 are rejected under 35 U.S.C. § 102(a) by a combination of "Critical Chain ...," API, 1997 ("Leach1") and Leach, "Schedule and Cost ...," API, 2002 ("Leach2"). Note that the publication dates of each reference – 1997 and 2002, respectively – are printed on the first page of each reference. The Examiner states on pp. 2-5 of the Office Action that certain elements of claims 1, 5, 9, 13-15are present in Leach1 while other elements of the claims are present in Leach2. The Examiner doesn't provide any explanation of why the two references were combined or why it is proper to combine two references in a 35 U.S.C. § 102 rejection.

In rejecting claims under 35 U.S.C. § 102, "[a] single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation." *Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 18 1375 (Fed. Cir. 2005). Notable aspects of this cited case law is the discussion of a single reference. In this case, Examiner Vo has combined two references to assert a rejection under 35 U.S.C. § 102. This is clearly improper and therefore the rejection should be withdrawn.

Further, M.P.E.P. § 2131.01 states:

> "Normally, only one reference should be used in making a rejection under 35 U.S.C. 102. However, a 35 U.S.C. 102 rejection over multiple references has been held to be proper when the extra references are cited to:
>
> (A) Prove the primary reference contains an "enabled disclosure;"
>
> (B) Explain the meaning of a term used in the primary reference; or
>
> (C) Show that a characteristic not disclosed in the reference is inherent.

In the rejection of claims 1, 5, 9, 13-15, the Examiner does not make any mention of the criteria for (A), (B) or (C) above. Thus, because Examiner Vo has improperly combined two references to assert a rejection under 35 U.S.C. § 102, the rejection should be withdrawn.

AGENDA ITEM #2:

Claim Elements "Continuously providing ..." and "Allowing the user ..."

With regard to claim elements "*continuously providing status information about the buffers to a user*" and "*allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers*" of all of Applicant's independent claims 1, 5, 9, 13 and 17, the Examiner states on p. 3 of the Office Action that this claim element is found at p. 8 of Leach1, p. 12 of Leach2 and the Exhibits of Leach2. The relevant portion of p. 8 of Leach1 is reproduced below:

> CCPM protects the critical chain from potential delays by subordinating critical chain feeding paths; placing an aggregated Feeding Buffer on each path that feeds the critical chain. This includes paths that merge with the critical chain at the end of the project. The feeding buffer provides a measurement and control mechanism to protect the critical chain, as described below. Figure 5 illustrates how the buffers absorb the late paths.
>
> This innovation immunizes the critical chain from potential delays in the feeding paths. It also provides a means to measure the feeding paths, while keeping focus on the critical chain.

The Examiner does not explain how the citation above discloses the claim element "*continuously providing status information about the buffers to a user.*" The Examiner has failed in his burden to show how the citation discloses providing status information about buffers to a user, as claimed by Applicant.

Further, the Examiner does not explain how the Leach1 phrase "The feeding buffer provides a measurement and control mechanism to protect the critical chain" discloses "*allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers.*" Again, the Examiner has failed in his burden to show how the citation discloses allowing a user to manage buffers, as claimed by Applicant.

AGENDA ITEM #3:

Claim Element "Reconciling resources ..."

With regard to claim element "*reconciling project resources among the plurality of projects so as to accommodate the critical chain*" of all of Applicant's independent claims 1, 5, 9, 13 and 17, the Examiner states on p. 3 of the Office Action that this claim element is found at Figure 3 of p. 5, and the last paragraph of p.5 of Leach1. Figure 3 of p. 5 of Leach1 is reproduced below:

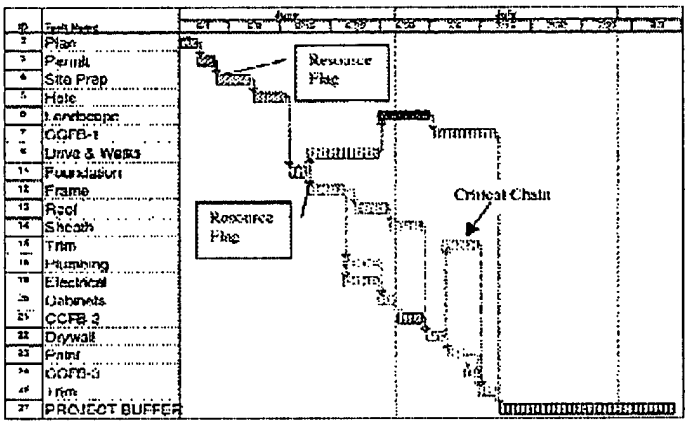

Figure 3: Example Critical Chain schedule identifies key features of the plan.

The Examiner does not explain how the figure above discloses the claim element "*reconciling project resources among the plurality of projects so as to accommodate the critical chain.*" The Examiner has failed in his burden to show how a figure alone can disclose the act of reconciling resources, as claimed by Applicant.

Further, the last paragraph of p. 5 of Leach1 is reproduced below:

> CCPM accounts for common cause variation as an essential element of the project management system. The process removes identifiable special causes of variation, including resource unavailability and common resource behavior patterns, including the student-syndrome and multi-tasking. CCPM Project Managers use resource flags to identify and ensure availability of resources on the critical chain.

Again, the Examiner does not explain how the Leach1 passage above discloses the claim element "*reconciling project resources among the plurality of projects so as to accommodate the critical chain.*" The passage above does not disclose the act of reconciling resources, much less the act of reconciling resources to accommodate a critical chain. Again, the Examiner has failed in his burden to show how the passage above can disclose the act of reconciling resources, as claimed by Applicant.

AGENDA ITEM #4:

Claim Element "Providing the user with an interface ..."

With regard to claim element "*providing the user with an interface for allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers*" of Applicant's independent claims 9 and 17, the Examiner states on p. 4 of the Office Action that this claim element is found at p. 1 ("Projects that use CCPM"), p. 3 ("Identify the Project Constraint") and p. 16 ("item 5") of Leach1.

p. 1 ("Projects that use CCPM") of Leach1 is reproduced below:

> Critical Chain Project Management (CCPM) provides a substantial step in ongoing improvement to the Project Management Body of Knowledge (PMBOK). The critical chain differs from the critical path by: a) Including resource dependencies, and b) Never changing.
>
> CCPM improves the project plan by ensuring that it is feasible and immune from reasonable common cause variation (uncertainty, or statistical fluctuations). It does this by aggregating uncertainty into buffers at the end of activity paths. The Project Buffer protects the overall project completion on the critical chain path, and Feeding Buffers protect the critical chain from path merging. Buffer Management enhances measurement and decision making for project control. CCPM implements required changes in resource behaviors, including elimination of date-driven activity performance and multitasking. Most of all, CCPM improves the focus of the Project Manager and performers. Projects that use CCPM have a greatly improved record of schedule, cost, and scope performance. CCPM projects are normally complete in lessthan one half of the time of projects using previous planning and control methods.

p. 3 ("Identify the Project Constraint") of Leach1 is reproduced below:

> TOC identifies the constraint of a project as the Critical Chain, or "The sequence of dependent events that prevents the project from completing in a shorter intewal. Resource dependencies determine the critical chain as much as do task dependencies."

> Defining the constraint of a project in terms of the schedule derives from the impact that schedule has on project cost and project scope. The three conditions are dependent. As schedule increases with fixed deliverable scope, cost usually increases. As scope increases with fixed cost (or resources), schedule tends to increase. As scope increases with fixed schedule, cost tends to increase.
>
> Critical Path project planning has an often hidden assumption that an acceptable way to account for potential resource constraints on the project is to first identify the critical path, and then perform resource leveling. Network specialists know that there is no optimum method for resource leveling. Network configurations; some resource leveling algorithms give very poor results. For most networks, application of the resource leveling algorithms lengthens the overall schedule. For this reason, few projects use the resource leveling tools.
>
> Figure 1 illustrates a typical deterministic project schedule. The colors represent unique resources. The plan identifies the last activity as a critical path activity. Resource leveling has eliminated the rest of the critical path. This is a frequent result of resource leveling methods.

p. 16 ("item 5") of Leach1 states: "Using buffer management as the primary tool for project management and control."

The Examiner does not explain how the citations above disclose the claim element "*providing the user with an interface for allowing the user to manage the buffers across the plurality of projects based on the status information about the buffers.*" The citations above do not even disclose an interface or any other method for a user to interact with a computer program. The Examiner has failed in his burden to show how the citations disclose a user interface, as claimed by Applicant.

AGENDA ITEM #5:
Claim Element "Modifying task prioritization ..."

With regard to claim element "*continuously modifying task prioritization for any task of the plurality of projects based on the status information about the buffers, wherein task prioritization is calculated across the plurality of projects*" of Applicant's independent claims 5, 13 and 17, the Examiner states on p. 4 of the Office Action that

this claim element is found at Leach1 p. 12, Leach2 lines 1-12 of p. 12 and Leach2 p. 31.

The relevant portion of p. 12 of Leach1 is reproduced below:

> The improved measurement system for Critical Chain Project Management follows the practice established by Dr. Goldratt for production operations. It uses buffers (that is, time) to measure activity chain performance. You size the buffers based on the length of the activity chain they protect. Buffer sizing uses the uncertainty in the duration of the Critical Chain activities to size the Project Buffer. Likewise, uncertainty in the duration of the feeding chain activities determines the size of each Critical Chain Feeding Buffer. CCPM sets explicit action levels for decisions. The decision levels are in terms of the buffer size, measured in days:
>
> 1. Within the first third of the buffer: no action.
>
> 2. Penetrate the middle third of the buffer: assess the problem and plan for action.
>
> 3. Penetrate the third third: initiate action.
>
> These measure apply to both the Project Buffer and the Critical Chain Feeding buffers. Figure 9 shows an example of using the buffers. Project teams monitor the Project Buffer (PB) and each Critical Chain Feeding Buffer (CCFB) at the appropriate time intervals for the project, usually weekly but at least monthly. For this tool to be fully useful, the buffer monitoring time must be at least as frequent as one third of the total buffer time. If the buffers are negative (i.e., latest activity on the chain is early relative to schedule date) or less than one third of the total buffer late (e.g., less than 10 days if the total buffer is 30 days), you do not need to take action. If extended durations penetrate the buffer between 113 and 213, the project team should plan actions for that chain to accelerate the current or future tasks and recover the buffer. If the activity performance penetrates the buffer by more than 213 of the buffer size, the project team should take the planned action. Through this mechanism, buffer management provides a unique anticipatory project management tool with clear decision criteria.

Leach2 lines 1-12 of p. 12 is reproduced below:

> 1. Feeding buffers placed at the end of chains of activities that merge into the critical chain.
>
> 2. Run rules that specify work on a project task must start when the activity is available and continue at 100% until complete.

3. Assured in-project resource leveling through the definition of the critical chain.

4. Across project resource leveling through project priority setting and staggering of project starts to the capacity of the constraining resource with a capacity buffer.

5. Buffer management, which provides all project resources a priority tool enable focused work on project tasks.

This balance of this paper identifies eleven factors (there are probably more!) that influence project performance to schedule and cost baseline, evaluates the impact on necessary schedule and cost buffers, and provides recommendations for bias corrections.

Leach2 p. 31 is reproduced below:

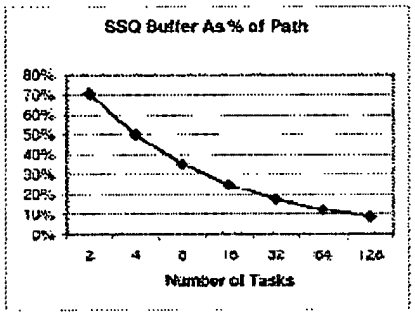

Exhibit 3: SSQ Buffer Variation with Number of Tasks

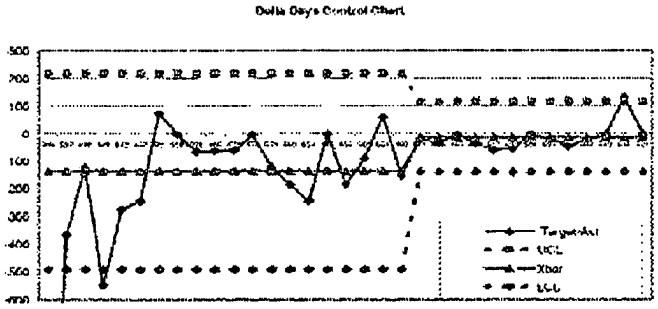

Exhibit 4: Real Project Schedule Variation Illustrates Wide Range

The Examiner does not explain how the citations above disclose the claim element "*continuously modifying task prioritization.*" The citations above do not even use the word "task" or the words "priority" or "prioritization." The Examiner has failed in his burden to show how the citations disclose a user interface, as claimed by Applicant.

CONCLUSION

In the event the examiner wishes to discuss any aspect of this proposed agenda, please contact the attorney at the telephone number identified below.

I look forward to discussing this case with you on **Monday August 31, 2009 at 1pm**. I will call you at that time for the telephone interview.

By: _____

Mark Terry
Attorney Registration No. 47,133
786-443-7720 (voice)